

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>			1. CONTRACT ID CODE	PAGE 1 OF 4 PAGES
2. AMENDMENT/MODIFICATION NO. <b>0005</b>	3. EFFECTIVE DATE <b>Sep 29, 2008</b>	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)	
6. ISSUED BY NASA/Stennis Space Center Office of Procurement Program Management Support Division Building 1100 Room 251H Stennis Space Center, MS 39529-6000		7. ADMINISTERED BY (If other than Item 6) <b>Same as block #6</b>		
8. NAME AND ADDRESS OF CONTRACTOR (No. Street, county, State and ZIP: Code)		(✓)	9A. AMENDMENT OF SOLICITATION NO. <b>NNS08257126R</b>	
		x	9B. DATED (SEE ITEM 11) <b>Jul 25, 2008</b>	
			10A. MODIFICATION OF CONTRACT/ORDER NO.	
			10B. DATED (SEE ITEM 13)	
CODE	FACILITY CODE			

**11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☒ is extended, ☐ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing Items 8 and 15, and returning one (1) copy of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATA SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and data specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

N/A

**13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**


(✓)	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER Specify type of modification and authority)

E. IMPORTANT: Contractor ☐ is not, ☒ is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

**Solicitation No. NNS08257126R for Low Speed Data Acquisition System (LSDAS) Signal Conditioners and Digitizers for the A3 Altitude Test Stand is hereby amended as follows: – see attached pages 2 through 4.**

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) <b>Michelle Stracener</b>	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA  BY (Signature of Contracting Officer)	16C. DATE SIGNED <b>Sep 29, 2008</b>
(Signature of person authorized to sign)			

a. The following changes to the solicitation document are hereby incorporated. Changes are notated in bold, underline and italics:

(1) Solicitation page 1, SF 1449, Block 8, Offer Due date ~~09/05/2008~~, 1500 LT 10/09/2008, 1500 LT.

(2) Page 5, **Period of Performance**: The performance period for each delivery order shall be cited on the delivery order issued. *However, the delivery date of the first pilot system to software developer shall be within thirty (30) calendar days after contractor's receipt of the delivery order. The delivery date of the "completed" pilot system to SSC, inclusive of requirements verification at the vendor, shall be within one hundred thirty (130) calendar days after contractor's receipt of the delivery order.* Delivery orders may be issued under this contract during the entire performance period. The expiration of the performance period during which orders may be issued shall not affect any delivery orders placed prior to the expiration of such period. Terms of contract shall remain in full force and effect in their application to such delivery orders.

(3) Page 5, Paragraph (A) Technical Compliance, subparagraph 1, last sentence:

At a minimum, supportive documentation shall address machining and other fabrication, quality control, ~~welding, welding~~ soldering, soldering inspection, assembly, cleaning, and post delivery inspection.

(4) Page 6, subparagraph 2(f):

The offeror shall provide a quality control manual. *Assurance Manual. As a minimum, the Quality Assurance Program shall be consistent with good standard commercial practices in the design, manufacture and testing of high quality instrumentation. Workmanship shall meet the "preferred" or acceptable" criteria as contained in the current edition of the NASA technical Standards, NASA STD-8739.1 through NASA-STD 8739.5:*

*NASA-STD-8739.1 WORKMANSHIP STANDARD FOR POLYMERIC APPLICATION ON ELECTRONIC ASSEMBLIES*  
*NASA-STD 8739.2 WORKMANSHIP STANDARD FOR SURFACE MOUNT TECHNOLOGY*  
*NASA-STD 8739.3 SOLDERED ELECTRICAL CONNECTIONS*  
*NASA-STD 8739.4 CRIMPING, INTERCONNECTING CABLES, HARNESSSES, AND WIRING*  
*NASA-STD-8739.5 FIBER OPTIC TERMINATIONS, CABLE ASSEMBLIES, AND INSTALLATION*

*These standards are available at:*

*<http://workmanship.NASA.gov/lib/insp/2%20books/frameset.html>*

*[http://standards.NASA.gov/public/public\\_query](http://standards.NASA.gov/public/public_query) NASA STDS.TAF*

(5) Page 7, Paragraph (E) Format, subparagraph 5, last sentence:

Also provide the pricing breakdown as required in paragraph (D) above in an excel spreadsheet on ~~the electronic media~~ a separate compact disk.

(6) Page 10, Paragraph D, Value Characteristics:

a) Technical Compliance ~~60 50%~~ - The government will evaluate to what extent proposal is in compliance with required Statement of Work/Specifications/Drawings as well as the reasonableness of the proposed approach.

b) Schedule ~~25 35 %~~ - The government will evaluate to what extent proposed schedule meets the government's needs as specified in the solicitation as well as the reasonableness of the schedule proposed.

b. The following changes to the Specification No. 200GT-GE03 dated April 25, 2008, are hereby incorporated into the subject solicitation:

(1) Section 3.2 Inputs, subparagraph 3.2.1.3.:

3.2.1.3 Common Mode Rejection Ratio (CMRR) Common Mode Rejection Ratio (CMRR) shall be a minimum of 100 db DC to 60Hz at a gain of ~~8~~ 10 or more with an input impedance of 1000 ohms. Minimum common mode rejection ratio shall be 80 db at any gain from DC to 60Hz. (Bridge-type devices).

(2) Section 3.2 Inputs, subparagraph 3.2.1.10.:

3.2.1.10 All inputs shall be capable of external (voltage- or T-insertion) calibration which isolate the transducer from the input and connect the external calibration source to the input.

(3) Section 3.2 Inputs, subparagraph 3.2.3.7, Accumulating Counters, add subparagraphs 3.2.3.7.6 and 3.2.3.7.7.:

3.2.3.7.6. The counters shall be separate and distinct from the discrete input modules.

3.2.3.7.7. The input frequency of the counter shall be up to 6,400 Hz.

(4) Section 3.4 Strain Gage/Resistive Bridge Completion Requirements:

A removable bridge completion card shall be provided for each signal conditioner. The bridge completion card shall also provide for the housing of the calibration resistors ~~and an area for any special preconditioning components~~ required by the user. No calibration or bridge completion resistors are required to be supplied with the unit. Solder terminals for bridge completion resistors and calibration components shall be provided on the card. Bridge completion card shall be configurable to accept 1, 2, or 4 arm active bridges.

(5) Section 3.4.1 Bridge Excitation:

An excitation power supply (when required) shall be an integral part of each signal conditioner but isolated from the amplifier power supply. Constant current and constant voltage shall be supported.

<u>Characteristic</u>	<u>Constant Voltage</u>	<u>Constant Current</u>
Range ( <b>minimum</b> )	0 to 10 volts ( <b><u>minimum</u></b> ) <b><u>0 to 28 volts (optional)</u></b>	0 to 15 mA ( <b><u>minimum</u></b> )
<b><u>Excitation Limits</u></b>	<b><u>100 mA</u></b>	<b><u>10 Volts</u></b>
Resolution	1 mV	50 $\mu$ A
Regulation	0.005% of setting	0.005%
Stability	0.01% of set value	0.01% or 1.5 $\mu$ A
(0 to full load)	for 8 hours	for 8 hours
Temperature Stability	0.003%/°C	0.005%/°C
Noise	1 mV from 0.1 to 100KHz <b><u>0.1 to 100 KHz</u></b>	0.01% full scale <b><u>from 0.1 to 100KHz</u></b>

(6) Section 3.8 Programming and Interface, **Delete** subparagraphs 3.8.2.3.13. and 3.8.2.3.14.

(7) Section 3.11.1 Shunt Calibrations, **Delete** subparagraph 3.11.1.4.

(8) Section 3.11.2, **Delete** Resistance Substitution and all subparagraphs under 3.11.2.

c. The due date for receipt of proposals is hereby changed to read: October 9, 2008, 1500 Central Time.

d. All other terms and conditions remain unchanged.